Exhibit P-40, BUDGET ITEM JUSTIFICATION							DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **Aircraft Procurement, Navy/APN-5 Aircraft Modifications**					P-1 ITEM NOMENCLATURE **T-45 Series Modification**						
Program Element for Code B Items:					Other Related Program Elements						

	Prior Years	ID Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
QTY		A									
COST (In Millions)	**78.8**	A	**21.7**	**22.2**	**44.2**	**42.7**	**34.3**	**38.8**	**33.3**	**62.8**	**378.8**

This line item funds modifications to T-45A aircraft. The T-45A Goshawk is a tandem-seat, carrier capable derivative of the existing British Aerospace Hawk aircraft powered by a single Rolls Royce Adour engine. It serves as the aircraft component of the T45TS integrated jet pilot training system which replaces the three decade old TA-4 and T-2 technology. The overall goal of the modifications budgeted in FY 2005 is to correct discrepancies and deficiencies discovered after delivery of the aircraft and to commence major upgrades to the aircraft cockpit, navigation system, and aircrew ejection seats. FY03 funded simulator is an analog conversion and will support production aircraft to be delivered to Kingsville in FY04. T-45 aircraft and simulators are facing critical avionics obsolescence and Diminishing Manufacturing Source (DMS) issues. OSIP 04-05 (Required Avionics Modernization Program (RAMP)) was established to convert the T-45As (analog) to the digital T-45C configuration.

The designed service life of the aircraft is 14,400 hours with the average remaining service life of inventory aircraft estimated at 11,692 hours.

The specific modifications budgeted and programmed are:

(TOA, $ in Thousands)

OSIP No.	Description	Prior Years	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
08-95	T45TS Correction of Deficiencies	65.7	10.0	12.6	17.2	12.6	6.6	6.1	5.9	35.2	171.8
16-96	T45TS Digital Cockpit	3.8	7.3								11.1
04-99	T45TS NACES P3I	9.3	0.3	0.1							9.7
11-02	Improved Directional Control		3.0	1.2	1.0	0.7					5.9
03-03	Engine Surge		1.1	4.5	3.5	3.3	3.3	4.0	4.0	3.2	27.0
10-04	T-45TS GPS			1.1	1.2	1.5	1.4	1.5	1.6	0.8	9.1
17-04	T45 RAMP/AVIONICS OBSOLESCENCE			2.7	21.3	24.5	23.0	27.2	21.9	23.6	144.2
	Total	78.8	21.7	22.2	44.2	42.7	34.3	38.8	33.3	62.8	378.8

Note: Totals may not add due to rounding.
*Indicates amount less than 51K.

Exhibit P-3a | Individual Modification

MODIFICATION TITLE: T45TS Correction to Deficiencies (OSIP 8-95)

MODELS OF SYSTEMS AFFECTED: T-45 Training System (T45TS) | TYPE MODIFICATION: Safety, Reliability, Increased Service Life, Imroved Mission Capabilities

DESCRIPTION/JUSTIFICATION:

Ejection Seat Handle MB-9155
Modification will standarize ejection seat firing handle to enhance aircrew safety. Incoporation will lower the seat bucket firing handle assembly to eliminate interference with flight controls. Installation of this ECP is in response to a F-18 mishap report that documented a safety deficiency and proposed recommendations relating to incidents of inadvertent ejection.

Uncommanded Gear Extension: MDA-T45TS-TBDs
Modification will increase travel of the landing gear control interconnect cable, increase cable friction, and change the gear selector valve actuation signal to only when the handle is in the full up or full down position. Installation of this ECP is in response to a T45TS Engineering Investigation that documented a deficiency and proposed recommendations relating to incidents of uncommanded landing gear extensions.

Ground Training Systems: MDA-T45TS-TBDs
Updates to the T-45 aircraft simulator to match evolving aircraft flight characteristics and software and academics enhancements to improve training capabilities. The following Ground Trainer Systems ECP's are included in the controls: Flap Actuation Simulators, Touch and Go Engine Surges, current and future Simulator Upgrades.

Structural ECPs
Modifications will incorporate changes to improve structural details to increase aircraft service life beyond 14,400 flight hours, per initial design specifications, to a projected 21,000 flight hours. During FSD testing of the T45 aircraft it was determined that incorporation of redesigned components applicable to the critical load paths will significantly increase the service life of the aircraft. This structural portion of this OSIP effects several structural components including, but not limited to: Wing Dolly, SS 02 Monitor Bracket, Horizontal Stabilators, Frame 24 Crossbeams Lugs, Wing Leading Edge Redesign, Frame 29 Lower Flange, Uplock Beam Forward Attach, Slat Track Rib 5 Downstop Bolt, Frame 28/32 Boundary/Vert Fin, Inlet Close-Out Fuel, Airframe Engine Mount, Frame 21 Structure, MLG Bay Tilted & Fasteners, Longitudial Systems Viscous, Frame 20 Structures, Frame 12 Vertical Splice, NLF Trunnion Beam, Slat Actuator Fitting Angle, Structure Life Improvement, Speed Brake Upgrade, Engine Mount Link Option, Stabilizer Back-Up Structures, Fuselage/Frame 10 Door, and Fin Bracket Lever Box Assembly.

Airframe ECP's
Modifications to the airframe other than structural defficiencies are also required to ensure safety of flight, aero-performance and maintainability to enable satisfactory PTR levels. This Airframe OSIP affects several airframe components and their sub-assemblies including, but not limited to: front, center and aft fuselage components, landing gear, tail cone, wing, horizontal and vertical control surfaces, flaps, canpoy/windscreen, hydraulic system, oxygen system, electrical system, fuel system, instrumentation systems, environmental controls, communications, navigation and emergency systems.

Avionics
Modifications to the Avionics will be required to update the Display unit, heads Up Display, and Global Positioning System and Inertial Navigation Assembly to enhance effectiveness of pilot training and avoid obsolescence. The Air Data Recorder improvements will increase available memory and allow monitoring of additional aircraft characteristics which will allow improved component tracking and increase service life. The following ECP's are part of the Avionics package of the aircraft and include: Air Data Recorder Upgrade (current and future), Gina Updates, Mission Display processor upgrades, Almanac Loading System upgrades, and GPS Upgrades.

Engines
Modifications will increase engine service life and correct safety related issues. These modifications include High Pressure Fuel Pump, Front Combustion Liner, High Pressure Compressor Ladder Assembly, Low Pressure Nozzle Guide Vanes, High pressure Nozzle Guide Vanes and a modification to address engine surge/compressor stall. Modification will increase the overhaul interval from 1000 starts to 2000 starts. This also addresses a T45TS Engineering Investigation that documented a deficiency with the combustor liner and oil galley. The Engine ECP's include the Dual Boost Pump, Low Pressure Nozzle Guide Vanes, High Pressure Nozzle Guide Vanes, HP Fuel Pump, Front Combustion Liners, Gas Turbine Starters, Engine Rising Idle, Engine Surges, and the Engine Ladder Assembly.

T45TS Correction to Deficiencies (OSIP 08-95)

FINANCIAL PLAN: (TOA, $ in Millions)

	Prior Years		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Installation Kits																				
Ejection Seat Handle MB-9155	112	.3																		
Uncommanded Gear Extension	35	.7																		
Ground Training Systems TBD's	40	2.3	9	.6																
Structural ECP's	798	20.9	92	.9	26	1.7	24	.7												
Avionics	272	1.7	25	.4	56	1.2	116	2.4												
Airframe ECP's			15	1.3	21	1.7	39	3.4												
Engines	487	4.2	49	.6	52	.8	141	2.1												
Installation Kits N/R		3.7		.2		.1		.1												
Installation Equipment																				
Ejection Seat Handle MB-9155		.2																		
Uncommanded Gear Extension		.1																		
Ground Training Systems TBD's		.6		.1																
Structural ECP's		.4		*		*		*												
Airframe ECP's				.4		.5		.5												
Avionics		1.1		.1		.1		.1												
Engines		2.0		*		*		*												
Installation Equipment N/R		2.0		.3		*		*												
Engineering Change Orders																				
Data		.8		.1		*		*												
Training Equipment		3.0		.5		*		*												
Support Equipment		.8		.1		*		*												
ILS																				
Other Support		1.1		.2		*		*												
Installation Cost	1,744	19.9	150	4.2	193	6.4	270	7.7												
TOTAL PROCUREMENT	**1,744**	**65.7**	**190**	**10.0**	**155**	**12.6**	**320**	**17.2**												

Notes:
1. Totals may not add due to rounding.
2. *indicates amounts less than 51K

Exhibit P-3a

MODELS OF SYSTEM AFFECTD: **T45TS** MODIFICATION TITLE: T45TS Correction to Deficiencies (OSIP 08-95)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **"I" and "D" Level Installation: Contractor Field Modification Team-Separate Contract**

ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2003: N/A FY 2004: N/A FY 2005: N/A

DELIVERY DATE: FY 2003: N/A FY 2004: N/A FY 2005: N/A

($ in Millions)

Cost:	Prior Years		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	**$**	Qty	$	Qty	**$**
FY 2002 & PY ( ) kits	1,744	19.9																		
FY 2003 ( ) kits			150	4.2	40	1.6														
FY 2004 ( ) kits					153	4.8	2	0.6												
FY 2005 ( ) kits							268	7.2												
FY 2006 ( ) kits																				
FY 2007 ( ) kits																				
FY 2008 ( ) kits																				
FY 2009 ( ) kits																				
To Complete ( ) kits																				
TOTAL	**1,744**	**19.9**	**150**	**4.2**	**193**	**6.4**	**270**	**7.7**												

Installation Schedule

	FY 2002 & Prior	FY 2003				FY 2004				FY 2005				FY 2006			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In	1744	38	38	38	36	48	48	48	49	67	67	68	68				
Out	1744	38	38	38	36	48	48	48	49	67	67	68	68				

	FY 2007				FY 2008				FY 2009				To Complete	TOTAL	
	1	2	3	4	1	2	3	4	1	2	3	4			
In															
Out															

Exhibit P-3a — Individual Modification

MODIFICATION TITLE: T45TS Digital Cockpit (OSIP 16-96)

MODELS OF SYSTEMS AFFECTED: T-45 TRAINING SYSTEM (T45TS) — TYPE MODIFICATION: PS SAFETY

DESCRIPTION/JUSTIFICATION: The T45TS Digital Cockpit will add two multi-function displays (MFDs) per cockpit, associated cockpit controls, and a 1553 digital bus, integrating them with the existing head-Up display (HUD), the airborne data recorder (ADR), and a separately procured Global Positioning System/Inertial Navigation System (GINA). FY03 funded simulator is an analog conversion and will support production aircraft to be delivered to Kingsville in FY04.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Approval for 3 simulators and 24 aircraft digital cockpits received in 1st quarter FY2002. Approval for FY04 and FY05 Avionics Obsolescence Effort received in 3rd quarter FY02.

FINANCIAL PLAN: (TOA, $ in Millions)

	Prior Years		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Installation Kits	2	1.0																		
Installation Kits NR																				
Installation Equipment	2	1.6																		
Installation Equipment NR				0.2																
Engineering Change Orders				0.1																
Data		0.8		0.3																
Training Equipment			1	6.4																
Support Equipment				0.3																
ILS																				
Other Support		0.2																		
Interim Contractor Support																				
Installation Cost	2	0.2																		
Total Procurement	**2**	**3.8**	**1**	**7.3**																

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: T45TS MODIFICATION TITLE: T45TS Digital Cockpit (OSIP 16-96)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Contractor field mod team**

ADMINISTRATIVE LEADTIME: Months PRODUCTION LEADTIME: Months

CONTRACT DATES: FY 2003: FY 2004: FY 2005:

DELIVERY DATE: FY 2003: FY 2004: FY 2005

($ in Millions)

Cost:	Prior Years		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	**$**
FY 2002 & PY ( ) kits	2	0.2																		
FY 2003 ( ) kits																				
FY 2004 ( ) kits																				
FY 2005 ( ) kits																				
FY 2006 ( ) kits																				
FY 2007 ( ) kits																				
FY 2008 ( ) kits																				
FY 2009 ( ) kits																				
To Complete ( ) kits																				
TOTAL	**2**	**0.2**																		

Notes:
1. Quantity totals include trainers

Installation Schedule

	FY 2002 & Prior	FY 2003				FY 2004				FY 2005				FY 2006			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In	2																
Out	2																

	FY 2007				FY 2008				FY 2009				To Complete	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4		
In														
Out														

Exhibit P-3a | Individual Modification

MODIFICATION TITLE: T-45A NACES P3I (Navy Aircrew Common Ejection Seat Pre- Planned Product Improvement) (OSIP 04-99)

MODELS OF SYSTEMS AFFECTED: T-45A NACES GFE EJECTION SEATS | TYPE MODIFICATION: PS SAFETY

DESCRIPTION/JUSTIFICATION:
An average of 15 Naval Aircrew fatalities occur each year from in-flight mishaps. Nearly half result from the seat ejecting crewmembers into the ground or water at low altitude and adverse attitudes. Because of their lighter throw weight, women are particularly susceptible to this and other ejection risks. A total of 137 aircraft (2 seats per A/C) and 6 trainers will be retrofitted. The NACES P3I program is divided into three phases of development and upon completion of each phase, existing aircraft seats will be modified with NACES retrofit kits.
Phase I - Current technology improvements to increase cockpit accommodation and reduce injury risk for all aircrew.
Phase II - Propulsion stability control to reduce the risk of major injury to less than 5% up to 600 knots.
Phase III - Stability control and surface avoidance capability for low altitudes, adverse attitudes, and out of control ejections.

Procurement of Phase I kits have been priced and are represented by this OSIP. Procurement costs for Phase II and III have not been determined.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
Contract awarded third quarter FY 1997 for development and testing. ECP approval 19 May 1999. Contract awarded August 1999.

FINANCIAL PLAN: (TOA, $ in Millions)

	Prior Years		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Installation Kits	258	7.3																		
Installation Kits N/R		0.7																		
Installation Equipment																				
Installation Equipment N/R																				
Engineering Change Orders																				
Data		0.1																		
Training Equipment	6	0.2																		
Support Equipment		*																		
ILS																				
Other Support																				
Interim Contractor Support																				
Installation Cost	122	1.1	74	0.3	68	0.1														
TOTAL PROCUREMENT	**264**	**9.3**		**0.3**		**0.1**														

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: **T-45A NACES GFE EJECTION SEATS** MODIFICATION TITLE: T-45A NACES P3I (OSIP 04-99)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Contractor Installations**

ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 5 Months

CONTRACT DATES: FY 2003: FY 2004: FY 2005:

DELIVERY DATE: FY 2003: FY 2004: FY 2005:

($ in Millions)

Cost:	Prior Years		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	**$**
FY 2002 & PY ( ) kits	**122**	**1.1**	**74**	**0.3**	**68**	**0.1**														
FY 2003 ( ) kits																				
FY 2004 ( ) kits																				
FY 2005 ( ) kits																				
FY 2006 ( ) kits																				
FY 2007 ( ) kits																				
FY 2008 ( ) kits																				
FY 2009 ( ) kits																				
To Complete ( ) kits																				
TOTAL	**122**	**1.1**	**74**	**0.3**	**68**	**0.1**														

Installation Schedule

	FY 2002 & Prior	FY 2003				FY 2004				FY 2005				FY 2006			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In	122	18	18	19	19	17	17	17	17								
Out	122	18	18	19	19	17	17	17	17								

	FY 2007				FY 2008				FY 2009				To	
	1	2	3	4	1	2	3	4	1	2	3	4	Complete	TOTAL
In														
Out														

Exhibit P-3a | Individual Modification

MODIFICATION TITLE: T45TS IMPROVED DIRECTIONAL CONTROL (OSIP 11-02)

MODELS OF SYSTEMS AFFECTED: T-45 TRAINING SYSTEM (T45TS) TYPE MODIFICATION: Safety

DESCRIPTION/JUSTIFICATION:

Loss of Directional Control during the high speed ground rollout has resulted in six Class A T-45 mishaps. The proposed modification will significantly improve the Ground Handling characteristics by improvements such as: Providing yaw rate feedback to the nosewheel steering system and the (SASS) Stability Augmented Steering System. This improvement will make external forces less influential on yaw rates, and provide for lower susceptibility to pilot induced oscillations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
Non-Recurring Engineering Efforts associated with this modification will be conducted during FY02. Kit procurement commenced in FY03 with installations beginning in FY05.

FINANCIAL PLAN: (TOA, $ in Millions)

	Prior Years		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
PROCUREMENT																				
Installation Kits			96	1.5	72	1.2														
Installation Kits N/R																				
Installation Equipment				1.0																
Installation Equipment N/R																				
Engineering Change Orders																				
Data				0.4																
Training Equipment			17	*																
Support Equipment				*																
ILS																				
Other Support																				
Interim Contractor Support																				
Installation Cost							96	1.0												
Total Procurement			**96**	**3.0**	**72**	**1.2**		**1.0**												

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: T-45 TRAINING SYSTEM (T45TS) MODIFICATION TITLE: T45TS IMPROVED DIRECTIONAL CONTROL (OSIP 11-02)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Contractor Field Mod Team**

ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 2003: May-03 FY 2004: Jan-04 FY 2005:

DELIVERY DATE: FY 2003: Oct-04 FY 2004: Oct-05 FY 2005:

($ in Millions)

Cost:	Prior Years		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	**$**
FY 2002 & PY ( ) kits																				
FY 2003 ( ) kits							96	1.0												
FY 2004 ( ) kits																				
FY 2005 ( ) kits																				
FY 2006 ( ) kits																				
FY 2007 ( ) kits																				
FY 2008 ( ) kits																				
FY 2009 ( ) kits																				
To Complete ( ) kits																				
TOTAL							**96**	**1.0**												

Installation Schedule

	FY 2002 & Prior	FY 2003				FY 2004				FY 2005				FY 2006			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In										24	24	24	24				
Out										24	24	24	24				

	FY 2007				FY 2008				FY 2009				To	
	1	2	3	4	1	2	3	4	1	2	3	4	Complete	TOTAL
In														
Out														

Exhibit P-3a Individual Modification

MODIFICATION TITLE: T45TS ENGINE SURGE MITIGATION (OSIP 03-03)

MODELS OF SYSTEMS AFFECTED: T-45 TRAINING SYSTEM (T45TS) TYPE MODIFICATION: Safety

DESCRIPTION/JUSTIFICATION: Engine Surge: T-45 engine surge is a critical safety concern for a single engine aircraft with over 195 surge events documented. Kits include modifications to engine inlet and fuel control system.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Funding was provided to correct T-45 F405 engine surge. Non recurring Engineering efforts in FY03. Kit deliveries and installs will start in FY05.

FINANCIAL PLAN: (TOA, $ in Millions)

	Prior Years		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Installation Kits					24	2.5	24	2.5												
Installation Kits N/R				1.0		2.0														
Installation Equipment																				
Installation Equipment N/R																				
Engineering Change Orders																				
Data				0.1																
Training Equipment																				
Support Equipment																				
ILS				*																
Other Support																				
Interim Contractor Support																				
Installation Cost							12	1.0												
Total Procurement				**1.1**	**24**	**4.5**	**24**	**3.5**												

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: T-45 TRAINING SYSTEM (T45TS) MODIFICATION TITLE: T45TS ENGINE SURGE MITIGATION (OSIP 03-03)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **TBD**

ADMINISTRATIVE LEADTIME: 7 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2003: FY 2004: Apr-04 FY 2005: Apr-05

DELIVERY DATE: FY 2003: FY 2004: Apr-05 FY 2005: Apr-06

($ in Millions)

Cost:	Prior Years		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	**$**
FY 2002 & PY ( ) kits																				
FY 2003 ( ) kits																				
FY 2004 ( ) kits							12	1.0												
FY 2005 ( ) kits																				
FY 2006 ( ) kits																				
FY 2007 ( ) kits																				
FY 2008 ( ) kits																				
FY 2009 ( ) kits																				
To Complete ( ) kits																				
TOTAL							**12**	**1.0**												

Installation Schedule

	FY 2002 & Prior	FY 2003				FY 2004				FY 2005				FY 2006			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In												6	6				
Out												6	6				

	FY 2007				FY 2008				FY 2009				To	
	1	2	3	4	1	2	3	4	1	2	3	4	Complete	TOTAL
In														
Out														

Exhibit P-3a | Individual Modification

MODIFICATION TITLE: T45TS GLOBAL POSITIONING SY T45TS GPS (OSIP10-04)

MODELS OF SYSTEMS AFFECTED: ANALOG COCKPIT | TYPE MODIFICATION: PS SAFETY

DESCRIPTION/JUSTIFICATION: Congressional requirement that all DoD aircraft be capable of navigating via GPS by the end of year 2005. A retrofit program will incorporate GPS in the existing Analog aircraft. There are currently 73 aircraft that will be retrofitted.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Kit deliveries will commence in FY06 with installation in FY06.

FINANCIAL PLAN: (TOA, $ in Millions)

	Prior Years		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Installation Kits					12	0.9	12	1.0												
Installation Kits NR																				
Installation Equipment																				
Installation Equipment NR																				
Engineering Change Orders																				
Data						0.1		0.1												
Training Equipment																				
Support Equipment																				
ILS						0.1		0.1												
Other Support																				
Interim Contractor Support																				
Installation Cost																				
Total Procurement					**12**	**1.1**	**12**	**1.2**												

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

Exhibit P-3a | Individual Modification

MODIFICATION TITLE: T45 AVIONICS OBSOLESCENCE/REQUIRED AVIONICS MODERNIZATION PROGRAM (RAMP) (17-04)

MODELS OF SYSTEMS AFFECTED: T-45 TRAINING SYSTEM (T45TS) TYPE MODIFICATION: PS SAFETY

DESCRIPTION/JUSTIFICATION: T45TS is facing critical obsolescence/performance issues. Components of various avionics boxes will not be supportable as a result of Diminishing Manufacturing Source issues that result in part obsolescence or supplier mortality. RAMP will resolve obsolescence issues and add two multi-function displays (MFDs) per cockpit, associated cockpit controls, and a 1553 digital bus, integrating them with the existing head-up display (HUD), the airborne data recorder (ADR), and a separately procured Global Positioning System/Inertial Navigation (GINA).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: FY03 provided funding (OSIP 16-96) for 1 simulator conversion and OSIP 17-04 will provide FY04 funding for DMS/obsolescence risk mitigation efforts.

FINANCIAL PLAN: (TOA, $ in Millions)

	Prior Years		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Installation Kits					2	0.7	12	2.1												
Installation Kits NR						0.9		0.7												
Installation Equipment					2	0.2	12	10.2												
Installation Equipment NR																				
Engineering Change Orders																				
Data						0.4		0.9												
Training Equipment							2	7.3												
Support Equipment						0.5		*												
ILS						*		*												
Other Support																				
Interim Contractor Support																				
Installation Cost																				
Total Procurement					**2**	**2.7**	**14**	**21.3**												

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K